



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,298	01/04/2002	John A. R. Spooner	A1036A	1250

21495 7590 04/09/2003

CORNING CABLE SYSTEMS LLC
P O BOX 489
HICKORY, NC 28603

EXAMINER

SANGHAVI, HEMANG

ART UNIT	PAPER NUMBER
----------	--------------

2874

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,298

Applicant(s)

SPOONER, JOHN A. R.

Examiner

Hemang Sanghavi

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

In response to the applicant's amendment received on January 16, 2003, all requested changes to the claims have been entered.

Applicant's arguments regarding claims 20-39 have been fully considered but are not deemed to be persuasive. See the detailed discussion in the remarks section.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delage et al (US 5,602,953) and Heywood (US 4,707,074).

Delage et al discloses a composite communication cable comprising an optical sub-unit, the optical sub-unit including a tube surrounding a plurality of optical fibers; an electrical sub-unit; and the optical and electrical sub-units being removably connected at a medial portion (17) between the sub-units by a common jacket material.

Delage et al fails to disclose strength members or filaments in the optical subunit for partially decoupling the optical fiber from the tube.

Heywood, in a related art, discloses an optical fiber cable including a tube surrounding plurality of optical fibers and filaments (9) are provided on wall of the tube for decoupling the optical fibers from the tube. Such filaments (rip cords) facilitate the removal of the fiber without the need to cut into the outer wall with a knife or like tool.

From collective teachings of Heywood, the ordinary artisan would have found it to be obvious at the time of the invention to provide filaments (rip cords) in the tube of the optical sub unit in Delage et al, as taught by Heywood, for the purpose of providing easy access to the fibers without any cutting tools.

As to fiber being tight buffer, it is well known in the art to use tight-buffered fibers or loose tube fibers depending upon application of the cable.

From readily commercially available fibers, the ordinary artisan would have found it obvious matter of design choice to choose tight-buffered fiber in the cable of Delage et al for the purpose of providing desirable application cable.

Delage et al fails to disclose the optical fiber with at least one periodic refractive index therein or use of multicore optical fibers.

The optical fibers with the periodic refractive index (grating) are commercially available and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use gratings in the optical fiber of Delage et al because such gratings are commonly used in the art to reduce dispersion by reflecting unwanted light signals with unwanted wavelengths.

As to the identification means, it is certainly well known in the art to provide identification means such as color coding, color coating, bar coding, and magnetic stripes on the optical fibers cables and/or strands.

It would have been obvious to one of ordinary skill in the art at the time of the invention to place identification means on the cable of Delage et al because it would allow easier identification of the strands when termination the cable.

Remarks

Applicant's arguments are not persuasive for the following reasons.

At page 5 of the amendment, applicant argues that it is respectfully submitted that the applied art, taken alone or in combination, with the other art of record, does not implicitly or expressly teach, disclosed, or suggest all of the features of the claims. Applicant further argues that the optical communication line 9 of the '953 patent requires two optical waveguides 11 loosely disposed in a plastic shell 13 without other components therein and the closed channels 6 of the '074 patent loosely house one or more optical fibers without other components in the closed channels.

Applicant further argues that the present invention recite a tube surround at least one optical fiber and strength members or filaments that are operative to at least partially de-couple said at least one optical fiber from the tube.

In contrast, Examiner respectfully disagrees with the above statement. Nowhere in '953 patent it states that the two optical waveguides 11 loosely disposed in a plastic shell 13 without other components therein (emphases added). Also, the rejection is based on Delage et al which discloses a tube including a plurality of optical fibers and the Heywood reference ('074) patent which teaches that the use of filaments included in the cover to facilitate access of the optical fibers. The ordinary artisan would have found it obvious to include such filaments in the cover of Delage et al reference to

Art Unit: 2874

provide access to the optical fibers. Thus, the modified cable in view of the above references meets all the limitations. As to the coaxial cable, '953 patent teaches that the cable is designed for telephone, data, and TV transmission. It is extremely well known in the art that the coaxial cables are used for TV transmission.

Also, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2874

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is 703-305-3484. The examiner can normally be reached on Monday-Thursday (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Hemang Sanghavi
Primary Examiner
Art Unit 2874

hs
April 7, 2003